



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,871	04/28/2006	Timothy P. Galante	60.469-109 PUS1; OT-5195	5419
64779 7590 08/28/2008 CARLSON GASKEY & OLDS 400 W MAPLE STE 350 BIRMINGHAM, MI 48009			EXAMINER PICO, ERIC E	
			ART UNIT 3654	PAPER NUMBER
			MAIL DATE 08/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,871	Applicant(s) GALANTE ET AL.	
	Examiner ERIC PICO	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim(s) 1 and 5** is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "near" in claim 1 is a relative term which renders the claim indefinite. The term "near" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4. Claim 5 recites the limitation "the door portion" in claim 5, lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3654

6. **Claim(s) 1-3, 6-10 and 13-16** is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurimoto U.S. Patent No. 1203364 in view of Walter U.S. Patent No. 3315767.

7. **Regarding claim 1**, Kurimoto discloses an elevator car assembly, shown in Figure 3, comprising

8. a frame;

9. at least one cabin door 18' supported for guided movement relative to the frame;

10. a door mover 19 for moving a hoistway door entrance 1, 2, 2' between open and closed positions, the door mover 19 being supported by the frame near a lower edge of the cabin door 18'; and

11. an interlock, comprised of clutch member 20, for moving a corresponding hoistway entrance door 1, 2, 2', the interlock 20 being positioned near the lower edge of the cabin door 18'.

12. Kurimoto is silent concerning a door mover for moving the cabin door between open and closed positions; an interlock for simultaneously moving a corresponding hoistway entrance door with a cabin door.

13. Walter teaches an elevator car assembly, comprising

14. a frame;

15. at least one cabin door 18 supported for guided movement relative to the frame;

16. a door mover 10 for moving the cabin door 18 between open and closed positions, the door mover 10 being supported by the frame near an edge of the cabin door 18; and

Art Unit: 3654

17. an interlock C for simultaneously moving a corresponding hoistway entrance door 22 with the cabin door 18, the interlock C being positioned near the edge of the cabin door 18.

18. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the interlock disclosed by Kurimoto for simultaneously moving a corresponding hoistway entrance door with a cabin door as taught by Walter to facilitate the opening of both the hoistway entrance door and cabin door.

19. **Regarding claim 2**, Kurimoto discloses a sill member 18 beneath the cabin door 18' and wherein the door mover 19 and the interlock 20 are supported beneath the sill 18.

20. **Regarding claim 3**, Kurimoto discloses the sill member 8 is located beneath the cabin door 18' and supported by the frame at least partially in a plane containing the cabin door 18'.

21. **Regarding claim 6**, Kurimoto discloses the door mover 19 is supported beneath the cabin door 18'.

22. **Regarding claim 7**, Kurimoto discloses the interlock 20 is supported beneath the cabin door 18'.

23. **Regarding claim 8**, Morris et al. discloses an elevator door assembly, comprising:

24. a car frame having a sill 18;

25. at least one car door 18' supported for movement along the sill 18 between an open and a closed position;

Art Unit: 3654

26. a door mover 19 supported near a lower edge of the car door 18;
27. an entrance door frame 3, 4 having a header and a sill, referred to as the bottom and top of door frame 3, 4, that are adapted to be supported in a fixed position near an opening to a hoistway;
28. at least one hoistway door 1, 2, 2' supported for movement relative to the header and door frame sill between open and closed positions; and
29. an interlock 20 that couples to the hoistway door 1, 2, 2' such that the hoistway door 1, 2, 2' moves responsive to the door mover 19, the interlock 20 being supported near the door mover 19.
30. Kurimoto is silent concerning a car frame having a rail; at least one car door supported for movement along the rail; and an interlock that couples the car door to the hoistway door such that the car door and the hoistway door move together responsive to the door mover.
31. Walter teaches an elevator door assembly, comprising:
32. a car frame having a rail 20 and a sill, shown in Figure 1;
33. at least one car door 18 supported for movement along the rail 20 and the sill between an open and a closed position;
34. a door mover 10 supported near an edge of the car door 18;
35. an entrance door frame, shown in Figure 1, having a header 58 and a sill that are adapted to be supported in a fixed position near an opening to a hoistway;
36. at least one hoistway door supported for movement relative to the header 58 and door frame sill between open and closed positions; and

Art Unit: 3654

37. an interlock C that couples the car door 18 to the hoistway door 22 such that the car doors 18 and the hoistway door 22 move together responsive to the door mover 10, the interlock C being supported near the door mover 10.

38. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the car door disclosed by Kurimoto for movement along a rail as taught by Walter and make the interlock disclosed by Kurimoto couple a car door to a hoistway door such that the doors move together responsive to a door mover as tau taught by Walter to facilitate the guidance and movement of the car and hoistway door.

39. **Regarding claim 9**, Kurimoto discloses a sill member 18 beneath the car door 18' and wherein the car door mover 19 and the interlock 20 are supported beneath the sill 18.

40. **Regarding claim 10**, Kurimoto discloses the sill member 18 is located beneath the car door 18' and supported by the car frame at least partially in a plane containing the car door 18.

41. **Regarding claim 13**, Kurimoto discloses the car door mover 19 is supported beneath the car door 18.

42. **Regarding claim 14**, Kurimoto discloses the interlock 20 is supported beneath the car door 18.

43. **Regarding claim 15 and 16**, Kurimoto discloses wherein the door mover 19 is closer to the lower edge of the car door 18' than an upper edge of the car door 18'.

44. **Claim(s) 4, 5, 11, and 12** is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurimoto U.S. Patent No. 1203364 in view of Walter U.S. Patent No.

Art Unit: 3654

3315767 as applied to claim 1 above, and further in view of Shalit U.S. Patent No. 4893435.

45. **Regarding claim 4 and 11**, Kurimoto is silent concerning the sill member includes a groove that receives a portion of the car door to guide movement of the lower portion of the car door as the car door moves between the open and closed positions.

46. Shalit teaches a sill member 19 includes a groove 20, 21 that receives a portion of a door 14, 15 to guide movement of the lower portion of the door 14, 15 as the door 14, 15 moves between the open and closed positions.

47. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a groove that receives a portion of the car door to guide movement of the lower portion of the car door as the car door moves between the open and closed positions as taught by Shalit to the sill member disclosed by Kurimoto to guide the car door panels.

48. **Regarding claim 5 and 12**, Kurimoto is silent concerning the portion of the car door extends through the groove in the sill member and the mover is coupled with the extending car door portion such that the mover selectively moves the car door.

49. Shalit teaches the portion of the door 14, 15 extends through the groove 20, 21 in the sill member 19 and the mover 10 is coupled with the extending door portion such that the mover 10 selectively moves the door 14, 15.

50. It would have been obvious to one of ordinary skill in the art at the time of the invention to couple the mover with the extending car door portion as taught by Shalit

such that the mover selectively moves the car door disclosed by Kurimoto to facilitate the opening and closing of the car door.

Response to Arguments

51. Applicant's arguments filed 05/20/2008 have been fully considered but they are not persuasive.

52. In response to applicant's argument, "that the term "near" in claims 1 and 8 does not render the claim indefinite" the term "near" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. One of ordinary skill in the art would not resolve where the location of the term "near" begins or ends. For example, one of ordinary skill in the art would not know if being closer to the upper edge of the car door is within the scope of being near the lower edge of the car door, or if being between the upper and lower edge of the car door is within the scope of being near the lower edge of the car door.

53. In response to applicant's argument, "nothing in the Kurimoto reference to indicate that the element labeled 18' is anything other than a wall of the car frame and there is no indication that it is a door" the location and operation clutch member on the elevator car facing the doors or the elevator shaft indicates that the car door, referred to as car entrance in column 4, line 85, is located on the element labeled 18'.

54. In response to applicant's argument that "If one were to attempt to substitute in the clutch mechanism C of the Walter reference to provide some engagement between

Art Unit: 3654

a hypothetical cabin door 18' and the shaft door in the Kurimoto reference for purposes of moving the shaft doors 1, 2, 2', that would change the principle operation of that reference", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). It would have been obvious to one of ordinary skill in the art at the time of the invention combine the teachings for simultaneously moving a corresponding hoistway entrance door with a cabin door as taught by Walter to the elevator disclosed by Kurimoto to open both a hoistway entrance door and a cabin door providing safety to the passengers of the cabin and passengers outside the hoistway.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3654

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

55. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC PICO whose telephone number is (571)272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654